

Claims

- [c1] 1. A superconductor electromagnetic transmitter device comprising:
- a superconductor structure;
 - a superconductor reflector in communication with said superconductor structure;
 - a first tube in communication with said superconductor structure;
 - a second tube in communication with first tube;
 - an anode in communication with said second tube; and
 - a cathode in communication with said second tube.
- [c2] 2. The device of claim 1, wherein said superconductor structure is ceramic superconductor $Y_{sub 1} Ba_{sub 2} Cu_{sub 3} O_{sub 7x}$.
- [c3] 3. The device of claim 1, wherein said superconductor structure has an aperture that extends through the length of the superconductor and out to the opposing side.
- [c4] 4. The device of claim 1, wherein said superconductor reflector is removable.

- [c5] 5. The device of claim 1, wherein said first tube is thermally tempered glass.
- [c6] 6. The device of claim 1, wherein said second tube is thermally tempered glass.
- [c7] 7. The device of claim 1, wherein the diameter of second tube is smaller than the diameter of the first tube.
- [c8] 8. The device of claim 1, wherein said second tube is inside first tube.
- [c9] 9. The device of claim 1, wherein between said anode and said cathode there is a space.
- [c10] 10. The device of claim 3, wherein the diameter of said aperture is consistent through the superconductor structure.
- [c11] 11. The device of claim 3, wherein the diameter of said aperture may vary depending on the desired size of wavelength.
- [c12] 12. The device of claim 9, wherein the measurement of said space may vary depending on the desired size of wavelength.
- [c13] 13. The device of claim 9, wherein the measurement of said space cannot be larger than the diameter of said

aperture.